

**Amendments to the Specification:**

Please replace the abstract with the following amended abstract:

A method and apparatus to compact trace in a trace buffer are described wherein a trace for a subset of program instructions formed from a set of program instructions is generated with the trace comprising a path identifier value, start address, and end address. The trace is stored in a trace buffer, retrieved from the trace buffer, and the subset of program instructions are reproduced using the trace. Other embodiments are described and claimed.